According to the *Pioneer Mail*, one lakh of rupees has been added to the Griffith bequest to found a university library attached to the Madras University, and another sum of sixty thousand rupees for university lectureships and research scholarships.

At a recent meeting of the Senate of the University of London, the following resolution was unanimously adopted:—"That the Senate have received with sincere regret the announcement by Sir Arthur Rücker that he wishes to relinquish office on September 30, 1908, and record their appreciation of the great services he has loyally rendered to the University as principal since its reconstitution."

The graduate school of applied science at Harvard University recently received the gift of about 2000 acres of valuable timber land as a special adjunct to its instruction in forestry. According to Prof. R. T. Fisher, the forest included in this gift comprises the best body of timber now to be found on an equal area in Massachusetts. Its special advantage is in the arrangement of the age-groups or generations of timber. It so happens that stands of various ages, from the small sapling to the mature tree, are almost equally represented in separate sections of the forest.

The annual prize distribution and conversazione of the Northampton Polytechnic Institute, Clerkenwell, E.C., will be held on Friday and Saturday, November 29 and 30. The Duke of Connaught has consented to distribute the prizes on November 29, and after the prize distribution the whole of the laboratories, workshops, drawing office, and studios of the institute, both in the main building and in the British Horological Institute adjoining (the technical optics department), will be on view in working order. The conversazione of members and students will be held on the following evening.

The Board of Education, South Kensington, has issued the following list of candidates successful in this year's competition for the Whitworth scholarships and exhibitions:—(1) Scholarships, 125*l*. a year each, tenable for three years: A. A. Rowse, London; N. J. Perryman, Portsmouth; G. Hudson, Portsmouth; J. Warren, Portsmouth. (2) Exhibitions, 50*l*. a year each, tenable for one year: A. W. Judge, Portsmouth; J. H. Hyde, Leytonstone; E. A. Steed, Devonport; A. J. Begg, Plumstead; M. R. Dewhurst, London; R. D. Given, Edinburgh; F. A. Bumpus, Birmingham; R. J. Iliffe, Liverpool; S. L. Symns, London; F. Morris, Portsmouth; W. P. Johnson, Kelsall Hill, Chester; T. W. Johnstone, Neyland; J. H. Neal, Devonport; H. Mawson, Hunslet, Leeds; E. W. Stedman, Sheerness; F. Morrison, Aberdeen; R. G. Milner, Plumstead; A. Hutchison, Glasgow; H. J. Middleton, Forest Gate; A. T. Phillips, Barking, Essex; W. Macgregor, Greenock; M. J. C. McCarthy, Sheerness; H. T. Wright, London; A. McFadyen, Lasswade, Midlothian; F. G. Rendell, Portsmouth; J. H. Blight, Devonport; F. C. D. Mann, Hayes, Kent; J. E. Collyer, South Woolwich; B. Baker, Southsea; L. C. Brown, Wolverton.

Mr. Asquith, Chancellor of the Exchequer, visited Aberystwyth on November 1 to open the Edward Davies chemical laboratories, the gift of Mr. David Davies, M.P., and his mother and sisters, to the University College of Wales, Aberystwyth. The new buildings have been erected at a cost of 25,000*l*. In the course of a speech at a great public meeting held subsequently, Mr. Asquith said Aberystwyth has owed little, at all events, until that day to the munificence of the man of wealth, and there are very few other institutions, either in England or in Wales, of which it can be said that it was brought into being and that for many years it was kept in being by the pence of the Welsh people. There are few more interesting or encouraging chapters in the history of democracy than that which recounts what in our time the Welsh people has done for education. In the course of thirty years something very near 120,000*l*. has been subscribed for the purposes of the college, Aberystwyth, and the remarkable feature is that it has been subscribed by 100,000 separate donors. The figures no doubt are equally striking at Bangor and Cardiff. The university system in Wales has been undertaken by the people for the people. During the same period there has been voluntarily subscribed to set on foot a system of intermediate schools something approaching the same sum—80,000*l*. to 100,000*l*. There is still much work to be done, many gaps to be filled; but the Welsh people formed their intermediate system first of all, and now, by the founding of their university colleges, any Welsh child of brains, zeal, and good character, whatever the social surroundings of its parentage, can climb without undue favour or assistance to the very highest position in the pursuits of industry or commerce.

SOCIETIES AND ACADEMIES.

London.

Royal Society, June 27.—"Note on the Use of the Radiometer in observing Small Gas Pressures; Application to the Detection of the Gaseous Products produced by Radioactive Bodies." By Sir James **Dewar**, F.R.S.

The experiments described in this paper seem to show that the radiometer may be used as an efficient instrument of research for the detection of small gas pressures and the study of radio-active products. For quantitative measurements the torsion balance or bifilar suspension must be employed. It would be interesting to repeat light repulsion experiments in the highest attainable charcoal vacuum. The author hopes to extend the investigation later.

Entomological Society, October 16.—Mr. C. O. Waterhouse, president, in the chair.—*Exhibits*.—A. H. **Jones**: A series of *Pieris napi*, var. *bryoniae*, from comparatively low altitudes near Budapest, showing a wide range of variation, and a remarkable aberration of *P. napi* (*napaeae*) bearing a strong resemblance on the underside to *P. rapae*.—M. **Burr**: An example of *Apterygida albipennis*, discovered by him near Dover this year; and a ♂ specimen of *D. verrucovirus*, an inhabitant of Scandinavia, from the same locality.—H. **Campion**: *Platycleis roeselii*, Hagenb., ♀, taken September 13 near Herne Bay, of which there are but few well-authenticated British specimens.—E. W. **Campion**: An aberrant specimen of *S. sanguineum*, ♂, from Epping Forest, suggesting relationship with certain Orthoptera, and two *Calopteryx virgo* of his own from the New Forest showing failure in pigment.—W. J. **Kaye**: Specimens of *Callicore aurelia*, Guen., together with a photograph of its larva, showing the remarkable branch-like horns rising out of the head.—Rev. F. D. **Morice**: A normal ♂ specimen of the bee *Anthidium manicatum*, L. (the "hoop-shaver bee" of Gilbert White's "Natural History of Selborne"), and a monstrosity or malformation of the same insect from Argentat, Corrèze, France.—C. O. **Waterhouse**: (1) A living ant, a species of Camponotus, found by Mr. Watson at Kew, in the pseudobulb of an orchis (probably a Bulbophyllum) from the Gold Coast. The bulb was much excavated, but it had no opening by which the ant could have entered; (2) a large wasp (a Salius allied to *dedjax*) with a spider, a Mygale rather larger than itself, but which it had captured and was carrying off.—Lieut.-Colonel Neville **Manders**: A melanic variety of *Hestina nama*, captured near Darjeeling, and a monstrosity of *Papilio krishna*, from Sikkim, in which the wings on the right side were much larger than those on the left.—H. **Main**: The larva of a hymenopterous parasite of *Pygaera bucephala*, of great size comparatively to its host.

Institution of Mining and Metallurgy, October 17.—Prof. William Gowland, president, in the chair.—The origin of the gold in the Rand banket: Prof. J. W. **Gregory**. A carefully reasoned argument in favour of the marine placer theory, as opposed to the infiltration theory. The author quoted the leading authorities both for and against his own conclusions, which are based on a personal visit to the Rand and a subsequent weighing of all available evidence. After a brief historical introduction, the paper was subdivided under the following heads:—theories of the genesis of the Rand gold; the rocks of the Rand goldfield; the arguments against the placer theory; evidence against the infiltration theory; evidence of the microscopic structure of the rocks; comparison with other goldfields; economic bearing of the problem; and, finally, summary of conclusions. The author stated that in his opinion the theory as to the origin of the banket in best agreement with the facts appeared to be that which regarded the banket as a marine placer in which gold and black sand (magnetite with some titaniferous iron) were laid down in a series of shore deposits. Owing to the late hour at which the discussion on this paper terminated, the other paper on the evening's agenda, the deviation of Rand boreholes from the vertical, by Mr. Joseph Kitchin, was held over for discussion at the meeting on November 21.

Manchester.

Literary and Philosophical Society, October 1.—Prof. H. B. Dixon, F.R.S., president, in the chair.—The president delivered an inaugural address, in which he referred shortly to the work on radio-activity, with which is intimately associated the name of Prof. E. Rutherford; the work of Messrs. Barlow and Pope, by which the valency of the chemical atom has been connected in a definite manner with its volume in crystalline structures; the researches of Prof. Perkin on the formation and stability of various carbon rings, more particularly his work on the camphor and terpene series, and at somewhat greater length on the work in which he was most interested personally—the propagation of the explosion wave in gases, the direct determination of the specific heat of CO_2, the temperature of the ignition points of gases, and the re-determination of the atomic weight of chlorine.

October 15.—Prof. H. B. Dixon, F.R.S., president, in the chair.—The relation between the crystalline form and the chemical constitution of simple inorganic substances: Prof. W. J. **Pope** and W. **Barlow.** The authors have applied the methods employed in their paper of October 16, 1906, to the study of the crystalline structure and molecular condition of a number of simple inorganic substances, such as the crystalline elements, binary compounds like silver iodide, potassium chloride, &c., ammonium halogen salts and compounds of the type of rubidium tri-iodide, RbI_3.

Paris.

Academy of Sciences, October 28.—M. H. Becquerel in the chair.—The disease of the pine in the Jura: MM. **Prillieux** and **Maublanc.** The disease of the pines in the Jura, recently pointed out by M. Bouvier and called by him *rouge*, has been studied in Germany by Hartig, who has shown that the disease is due to the attack of a parasitic fungus, *Phoma abietina.* The same fungus, for which the authors prefer the name *Fusicoccum abietinum,* attacks the pines in the Vosges and the Jura. The disease is not so grave as has been supposed by M. Bouvier, as the trees are rarely killed by it, certain of the branches only being attacked. The rational treatment is the removal of the dead branches and their destruction by incineration; in this way the fructification of the fungus and the dissemination of its spores are avoided; but this treatment may be too costly, and not justified by the actual losses threatened.—The heat of formation of the oxides of lithium: M. **de Forcrand.** A criticism of the data put forward by various authors for the heat of formation of Li_2O, together with experimental data for the heat of formation of LiOH and Li_2O_2.—Observations of the comet 1907*e* (Mellish) made at the Observatory of Besançon with the bent equatorial: P. **Chofardet.** Apparent positions of the comet, and position of the comparison star for the night of October 17. The comet was of the ninth magnitude, of circular form, without a distinct nucleus. Total diameter about 2′.—Observations of the comet 1907*e* made at the Observatory of Algiers with the 31·8 cm. bent equatorial: MM. **Sy** and **Villatte.** Similar sets of observations for October 18 and 20.—Critical transcendental points and inverse functions of integral functions: Pierre **Boutroux.**—Contribution to the synthesis of precious stones of the family of the aluminides: F. **Bordas** (see p. 17).—A new quantitative measuring instrument for the X-rays: H. **Guilleminot.**—Some iodomercurates: A. **Duboin.** The following double iodides have been isolated in a crystalline form and analysed:—

$$FeI_2,2HgI_2,6H_2O;\ HgO,2AlI_3,3HgI_2,15H_2O;\ \text{and}\ 2AlI_3,5AgI,2AgO,13H_2O.$$

—A new method of determining the atomic weights of precision simultaneously for all the elements present in a single chemical reaction: G. D. **Hinrichs.** The author describes a graphical method of reduction to the experimental data for silver, chlorine, thallium, nitrogen, oxygen, and radium, with the result that all the atomic weights are reduced to multiples of 0·5.—A colloidal solution of arsenic: V. **Auger.** A hydrochloric acid solution of arsenious anhydride reduced by hypophosphorous acid at a low temperature in presence of a large amount of alcohol gives a reddish-brown powder, consisting of metallic arsenic, 68·2 per cent.; phosphorus, 0·97 per cent.; alcohol, 2·5 per cent.; and water, 28·4 per cent. This form of arsenic possesses the property of dissolving immediately in a dilute solution of caustic soda, giving a brown colloidal solution, the properties of which are given in detail.—Some causes of error in the estimation of phosphorus in iron, cast iron, and steel: G. **Chesneau.**—The formation of liquid crystals of two new compounds of cholesterin: Paul **Gaubert.** The two compounds are obtained by heating cholesterol with glycollic acid or with glycerol.—The disease of the pine in the forests of the Jura: E. **Henry.** This disease was first observed in the summer of 1906, and up to the present has not caused the death of a single tree.—A new method of reaction of the skin to tuberculosis, and its utilisation in the diagnosis of tuberculosis: J. **Lignieres.** A development of the Pirket reaction in which the tuberculin may be replaced by dead tubercle bacilli. The skin need not be broken, as it is sufficient to rub the dead bacilli or pure tuberculin in until the skin is well reddened. Healthy animals give no specific reaction but with tuberculous animals there is a well-marked reaction.—The explanation of the general mechanism of the transformation of glycogen into glucose by the muscles and the animal tissues: F. **Maignon.** The author concludes from his experiments that the muscles possess an amylase capable of effecting the transformation of glycogen into glucose.—The transparency and colour of sea water in the English Channel: M. **Letalle.**

New South Wales.

Royal Society, August 7.—Mr. H. A. Lenehan, vice-president, in the chair.—Note on copper in andesite from near Lautoka, Fiji: H. I. **Jensen.** This paper describes the occurrence of lumps of copper ore weighing from 1 lb. in andesitic matrix. An analysis of a specimen showed that it contained 53½ per cent. Cu, 7¾ per cent. Fe, and 21½ per cent. S, the metallic portion being therefore a mixture of bornite and chalcocite. A microscopic examination confirmed the presence of these two minerals. The same minerals were found to occur in many of the normal andesites of the district in smaller quantity. A quantitative estimation revealed 0·034 per cent. of CuO in the normal andesite. It appears from the examination of specimens obtained that either copper ore has segregated out in the consolidation of the lava, or else, in the period of consolidation, magmatic vapours have extracted the copper from portions of the lava and deposited it elsewhere in the mass. The copper distinctly belongs to the andesite magma of the district, and does not constitute a mere xenogenic included product. It is interesting to note that such a differentiation has there taken place in a true volcanic rock.—Analysis of a specimen of sea-water from Coogee, New South Wales: C. J. **White.** Special attention was paid to the specific gravity determinations (for the calculation of which Buchanan's hydrometer No. 6 was used), for this gives the salinity directly, and indirectly gives very valuable indications of the various constituents present (the ratio of dissolved salts to one another being practically constant for all ocean waters).—Notes on some aboriginal tribes: R. H. **Mathews.**—Note on the action of lime on the available soil constituents: F. B. **Guthrie** and L. **Cohen.** The authors have investigated the changes that take place in the amounts of water-soluble and citric-soluble potash and phosphoric acid in limed soils in pots. Three kinds of soil were used, sand, garden loam, and clay. They find that in all cases the amount of mineral plant-food soluble in water had diminished to a considerable extent in the unlimed pots after standing for a month. The effect of liming has been to lessen this loss, but it does not appear to prevent it entirely. There is less water-soluble plant-food in the limed soils after a month than in the original soils, but more than in the untreated soils after a month. The action of lime is largely to increase the amount of nitrogen as nitrites; the nitrate-nitrogen is almost the same in the limed and the unlimed soils, except with the clay soil, where the nitrates are diminished. The total nitrogen as nitrite and nitrate is increased by liming, and the action of lime would appear to be to favour the development of the nitrous organism in particular.

September 4.—Mr. H. A. Lenehan, vice-president, in the chair.—The one-wheeled car: L. **Hargrave.** The paper points out the adaptability of the gyro-engine, a combination of the gyroscope and revolving cylinder engine, for balancing and driving all sorts of vehicles on one wheel over country that would otherwise be impracticable.—The steady deflection method of current measurement with an electrometer: Prof. J. A. **Pollock.** The steady deflection method of measuring currents with an electrometer consists in arranging that the charge on the ordinarily insulated quadrants shall leak to earth at a suitable rate proportional to the potential difference between the two pairs of quadrants. In the paper two ways which have been proposed for carrying out the method are mentioned and discussed.

DIARY OF SOCIETIES.

THURSDAY, NOVEMBER 7.

ROYAL SOCIETY, at 4.30—The Effect of Pressure upon the Arc Spectra of Metals: W. Geoffrey Duffield.—The Electric Discharge in Monatomic Gases: F. Soddy and T. D. Mackenzie.—The Diurnal Variation of Terrestrial Magnetism: Prof. A. Schuster, F.R.S.—On the Measurement of Temperatures in the Cylinder of a Gas Engine: Prof. H. L. Callendar, F.R.S., and Prof. W. E. Dalby.—Note on the Association of Helium and Thorium in Minerals: Hon. R. J. Strutt, F.R.S.—Further Results of the Experimental Treatment of Trypanosomiasis in Rats (Progress Report of Sleeping Sickness Committee of the Royal Society): H. G. Plimmer and J. D. Thomson.

RÖNTGEN SOCIETY, at 8.15.—The Presidential Address, The Production of High Frequency Oscillations, with Demonstrations: W. Duddell, F.R.S.

LINNEAN SOCIETY, at 8.—The Origin of the Di-trimerous Whorls among Flowers of Dicotyledons: Rev. George Henslow.—Unrecorded Acari from New Zealand: Albert D. Michael.—On *Ænigmatistes africanus*, a new Genus and Species of Diptera: R. Shelford.—*Exhibits*:—A copy of Hudson's "Flora Anglica." 1778, with numerous annotations by the Rev. William Kirby: Alexander Stevenson.—Abnormal Stem of *Eucalyptus salmonophloia*, F. Muell., from West Australia: Dr. A. B. Rendle.

CHEMICAL SOCIETY, at 8.30.—Gaseous Nitrogen Trioxide: H. B. Baker and Mrs. M. Baker.—The Atomic Weight of Tellurium: H. B. Baker and A. H. Bennett.—The Isomerism of the Double Sulphites of Sodium and Potassium: M. H. Godby.—Studies in the Camphane Series, Part xxiv, Camphoryldithiocarbamic Acid and Camphorylthiocarbimide: M. O. Forster and T. Jackson.—The Vapour Pressures of Triethylamine, of *sym*-Trimethylpyridine, and their Mixtures with Water: R. T. Lattey.—Liquid Triethylamine: R. T. Lattey.—The Action of Sulphuretted Hydrogen on Solutions of Sodium Hydrosulphite: F. S. Sinnatt.—The Alkyl Compounds of Gold. Diethylauric Bromide. Preliminary Note: W. J. Pope and C. S. Gibson.—Note on the Constitution of Homoeriodictyol: F. B. Power and F. Tutin.—The Interaction of Methylene Chloride and the Sodium Derivative of Ethyl Malonate: F. Tutin.—Preparation of Aliphatic Nitro-compounds by the Interaction of the Alkyl Iodides and Mercurous Nitrite: P. C. Rây and P. Neogi.—Some Mercury Derivatives of Camphor: J. E. Marsh and R. de J. F. Struthers.—Contribution to the Chemistry of the Terpenes. II. The Oxidation of Limonene with Chromylchloride: G. G. Henderson.—The Synthesis of Acridines and Phenonaphthacridines: Tetra- and Hexa-methylacridines: Dimethylphenonaphthacridines: Dixylylmethylenediamines: A. Senier and A. Compton.

FRIDAY, NOVEMBER 8.

ROYAL ASTRONOMICAL SOCIETY, at 5.—The Nebula H.iv. 74 Cygni: Max Wolf.—Note on the Permanency of Some Photo-visual Lenses: W. J. S. Lockyer.—Occultation of the Hyades: Walter Heath.—Disappearance of Saturn's Ring System, 1907 October: R. T. A. Innes.—(1) The Ultra-violet Region in Sun-spot Spectra; (2) The Spectrum of Comet *d* 1907 (Daniel): J. Evershed.—Tables for computing Standard Coordinates on Photographic Plates: A. R. Hinks.

MALACOLOGICAL SOCIETY, at 8.—Description of a New Species of Clathurella, probably from Ceylon: H. B. Preston.—On the Mollusca of Birket-el-Qurun, Egypt: C. A. Smith.—*Turbo granoliratus* (New Guinea); *Sistrum chrysalis*, *Purpura bougei*, *Natica bougei* (New Caledonia); *Urosalpinx walkeri*, *Listra walkeri* (N. W. Australia); *Amalthea coxi* (Port Stephens); *Pitaria elata* (Sierra Leone); all new species: G. B. Sowerby.—Note on the Originals of the Illustrations for E. M. da Costa's "Historia Naturalis Testaceorum Britanniæ," London, 1778: Alex. Reynell.

PHYSICAL SOCIETY, at 8.—Discussion on Mr. Campbell's Paper on the use of Variable Mutual Inductances.—A Graphic Method for Stream-lines and Equipotential Surfaces: L. F. Richardson.—On the Lateral Vibrations of Bars Supported at two Points with one end Overhanging: Dr. J. Morrow.

MONDAY, NOVEMBER 11.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—The Great Douglas Glacier of New Zealand and its Neighbourhood: J. Mackintosh Bell.

TUESDAY, NOVEMBER 12.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Extension, Widening and Strengthening of Folkestone Pier: H. T. Ker.—The Tranmere Bay Development-Works: S. H. Ellis.

ZOOLOGICAL SOCIETY, at 8.30.—On the Scales of Fish: E. S. Goodrich, F.R.S.—The Rudd Exploration of South Africa. VIII., List of Mammals obtained by Mr. Grant at Beira: Oldfield Thomas, F.R.S., and R. C. Wroughton.—Notes on two African Mammals: R. Lydekker, F.R.S.—Notes on the Feeding of Serpents in Captivity: Dr. P. Chalmers Mitchell, F.R.S., and R. I. Pocock.—Descriptions of new Loricariid Fishes from South America: C. Tate Regan.—Notes on Mayer's Pigeon: Lt.-Col. N. Manders.—On some Points in the Structure of *Galidictis striata*: F. E. Beddard, F.R.S.

SOCIOLOGICAL SOCIETY, at 8.—The Genealogical Method in Anthropological Inquiry: Dr. W. H. R. Rivers.

MINERALOGICAL SOCIETY, at 8.—Anniversary meeting.—On Hopaite and other Zinc Phosphates and Associated Minerals from Rhodesia, Broken Hill Mines: L. J. Spencer.—Notes on Zeolites from Cornwall and Devon: A. Russell.—The Question of a Relation between Isomorphous Miscibility and Parallel Growth of Crystals: T. V. Barker.—On Binnite, Anatase, Brookite and Molybdenite from the Binnenthal: R. H. Solly.—Note on the Crystallisation of Potassium Bichromate: H. A. Miers.

THURSDAY, NOVEMBER 14.

ROYAL SOCIETY, at 4.30.—*Probable Papers*:—On the Cranial and Facial Characters of the Neanderthal Race: Prof. W. J. Sollas, F.R.S.—Some Features in the Hereditary Transmission of the Self-Black and the "Irish" Coat Characters in Rats: G. P. Mudge.—On the Inheritance of Eye-colour in Man: C. C. Hurst.—On the Result of Crossing Round with Wrinkled Peas, with Special Reference to their Starch Grains: A. D. Darbishire.—On the Rate of the Elimination of Chloroform from the Blood after Anæsthesia: G. A. Buckmaster and J. A. Gardner.—Implantation of Actively Proliferating Epithelium: J. O. Wakelin-Barratt.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—The Dielectric Strength or Insulating Materials and the Grading of Cables: Alexander Russell.

MATHEMATICAL SOCIETY, at 5.30.—Annual General Meeting.—Election of Council and Officers.—On Hypercomplex Numbers: J. H. Maclagan Wedderburn.—Addendum to a Paper on the Inversion of a Repeated Infinite Integral: T. J. I'A. Bromwich.—Generalisation of a Theorem in the Theory of Divergent Series: G. H. Hardy.—Uniform and Non-uniform Convergence and Divergence of a Series and the Distinction between Right and Left: Dr. W. H. Young.—Application of Quaternions to the Problem of the Infinitesimal Deformation of a Surface: J. E. Campbell.—Nodal Cubics through Eight given Points: J. E. Wright.—The Invariants of a Binary Quintic and the Reality of its Roots: Dr. H. F. Baker.—On a Transformation of Hypergeometric Series: Rev. Dr. E. W. Barnes.—On a Transformation of a Certain Hypergeometric Series: Prof. M. J. M. Hill.—A General Theorem on Integral Functions of Order less than One-half: J. E. Littlewood.

FRIDAY, NOVEMBER 15.

INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Labour-saving Appliances at the Mines of the New Kleinfontein Co., Transvaal: E. J. Way.

CONTENTS.

PAGE

Scientific Worthies. XXXVI.—Sir William Crookes, F.R.S. By Prof. P. Zeeman 1
The Soils of Ireland. By A. D. H. 4
Scholarships and Industry. By Prof. Walter M. Gardner 4
Personal Hygiene 5

Our Book Shelf:—

Perry: "Practical Mathematics" 6
Rey: "La Théorie de la Physique chez les Physiciens contemporains."—**T. P. N.** 6
Wood: "How to tell the Birds from the Flowers: a Manual of Flornithology for Beginners" 7

Letters to the Editor.—

Winding of Rivers in Plains.—**Sir Oliver Lodge, F.R.S.** 7
Recalculation of Atomic Weights.—**H. E. Watson** . 7
The Fauna of Madagascar.—**Frank E. Beddard, F.R.S.** 8
The Interpretation of Mendelian Phenomena.—**Geo. P. Mudge; G. Archdall Reid** 8
Newton's Rings in Polarised Light.—**P. V. Bevan** . 9
The Fishes of the Nile. (*Illustrated.*) **By W. C. M.** . 10
Some Recent Papers on Meteorites. (*Illustrated.*) **By L. J. S.** 12
Notes 13

Our Astronomical Column:—

Comet Mellish (1907*e*) 17
The Transit of Mercury 18
Changes on Saturn's Rings 18
A Bright Meteor 18
The New Municipal Technical Institute, Belfast. (*Illustrated.*) 18
London Day Training College for Teachers 19
Immunity to Disease among Plants. By Prof. F. E. Weiss 20
The Bed of the Western Pacific Ocean 21
Hydrology in Egypt 21
University and Educational Intelligence 21
Societies and Academies 22
Diary of Societies 24